

ANNEX A

(clean version of paragraph spanning pages 6 and 7 of application)

On the other hand, the present invention is configured in one embodiment to include an adapter plate 40 as shown in Figures 1, 2, 4, 5, and 6. The adapter plate is generally of a length 42 commensurate with the bottom portion of the towel dispenser and includes a pair of mounting projections 44,46, adapted to be inserted into slots in the side walls of the towel dispenser in order to pivotally mount the plate therein. In this connection it is noted that the front portion may be pivotally secured to the back portion of the towel dispensers such that the dispenser is moved forwardly to reload the dispenser. It is thus desirable to have the plate 40 be able to pivot and accommodate this procedure. Adaptor plate 40 is further provided with a pair of laterally projecting terminal portions 48,50 which operate to abridge the length of the dispensing aperture when the plate 40 is mounted in the bottom portion of the dispenser as shown in Figures 1, 2 and 4. It will be further appreciated that the terminal portions, 48 and 50 are upwardly inclined with respect to the bottom of the dispenser (likewise with respect to the bottom surface of the plate) as shown in Figure 6. The angle of inclination 52 is preferably about 20 degrees but may be from about 10 to about 30 degrees. Thus the present invention provides a unique configuration for a gravity-feed towel dispenser generally having the characteristics that the transverse length of the dispensing aperture of the towel dispenser is abridged to a length L' of from about 80 to about 90 percent of the transverse length L of interfolded towels to be dispensed there through. In a preferred embodiment there is provided an adapter plate to render a prior art gravity feed towel dispenser to modify the geometry of a prior art gravity-feed towel dispenser to the configuration of the present invention. A particularly preferred adapter plate comprises a pair of upwardly inclined terminal portion which project laterally and upwardly at each end of the adapter plate. The plate is generally elongated and rectangular as shown in Figure 5. The elongated dispensing aperture in a particularly preferred embodiment is abridged to a length L' of about 85 percent of the transverse length L of the interfolded towels. That is to say, a nine inch aperture length is provided for a 10 $\frac{1}{2}$ inch towel, for example. The upwardly inclined terminal portions typically have an angle of inclination of anywhere from about 10 to about 30 degrees whereas about 20 degrees is particularly preferred. When the embodiment is an adapter plate for securing to a prior art towel dispenser, the adapter plate is pivotally secured in the housing

in slots 54,56, for example, such that it will not interfere with the loading operation. The geometry of the adapter plate is such (as best shown in Figure 5) that it defines a central enlarged portion of a dispensing aperture and two restricted terminal portions. The central enlarged portion typically has a span of at least about twice the span of the restricted portions of the dispensing aperture. The terminal, or restricted portions of the dispensing aperture have a span of from about 20 to about 40 percent of the transverse width of the interfolded towels. That is to say the restricted portions have a span of about one inch for dispensing a multi-fold towel having a panel width of about $3 \frac{1}{2}$ inches. In such geometry, the terminal portions of the aperture have a span of about 30 percent of the transverse width of the interfolded towels. The terminal portions typically extend over at least about 40 percent of the abridged length of the dispensing aperture. That is to say the terminal portions such as terminal portions 30, 32 would extend over at least about 40 percent of the length L' shown in Figure 2 or about $3 \frac{1}{2}$ inches for a nine inch aperture. The gravity-feed towel dispenser shown in Figures 1, 2, 4, 5 and 6 are particularly suitable for dispensing multi-fold towels, that is, square towels folded such that the terminal panel is interwoven with the end panel of the proceeding towel as is well known to one of skill in the art. This feature of the invention will be particularly appreciated from the following data wherein dispensing problems were noted over 100's of dispensing attempts.